

Book Review

The Flora of Delhi by J. K. Maheshwari. Council of Scientific and Industrial Research, New Delhi, India. Printed by N. K. Gossain & Co. Private Ltd., 7/1 Grant Lane, Calcutta - 12 — 1963 — 447 pages. Price £2 16s or Rs28 or \$8U.S.

University students of botany at Delhi are fortunate in now having a flora dealing with the wild, naturalized and cultivated plants of their area. Moreover, amateur and professional botanists, school teachers, nature lovers, foreign visitors and those with gardens should also find in this 447 page book something to their interest. The very thick covers will stand up to severe handling whether in the field or in the laboratory and their dark blue colour will not be easily soiled in monsoon rains or in classroom ink fights. The general facies is pleasing and each species stands out clearly in print from the next. There are few printer's errors and the author's style is clear. The keys and descriptions are short but give the important and essential characters of the various species and groups and how to distinguish one from another. Thus the busy undergraduate with other subjects to read as well as botany is not left discouraged, over-burdened and blurred with unnecessary detail. He is introduced to a wide range of families of flowering plants in the Bentham and Hooker style, a system which is easy to grasp and which will probably lead him down to the correct identification of a required species quicker than some of the more modern systematic disciplines. What he may believe in later is another matter.

The book is not just a dull compilation of keys and descriptions for the author brightens it by comments on each species in a short paragraph which often contains some edifying, stimulating, original or unexpected information. Thus: "*Peganum harmala* — The presence of this plant is said to indicate accumulation of potassium nitrate in the soil. *Sesbania sesban* — An excellent gun-powder charcoal is made from its soft, white wood. *Carthamus oxyacantha* — It is believed that the seeds were brought to Uttar Pradesh a few years ago by the *Pili Aandhi* (yellow dust-storm). The weed exhausts the soils. The seeds germinate as the atmosphere warms up in April and May."

Flowering and fruiting months are given as well as localities. For most species there is a vernacular name, here wisely included. Country people in India often have an amazing knowledge of the local names of their plants and the collector can ask them the name of a species in the field and will usually find, on consulting the book, that it fits the plant in question. English names are given if there is one but are strangely omitted for certain well-known

species such as lucerne, *Medicago sativa*, papaw or papaya, *Carica papaya*, chicory, *Chicorium intybus* and lettuce, *Lactuca sativa*. The last one, however, is called salad in Delhi. There is a very useful and selective bibliography at the end which will give the student a good insight into works on the Indian flora and will also introduce him to the plants of some neighbouring countries.

A notable feature of the book is the 38 page introduction dealing with previous work in the area, geographical features, climate, soils and plant communities. The collector looking for rare or spectacular plants in Delhi State would probably be a bit disappointed as the flora here consists mostly of pantropical weeds, aliens and exotic avenue trees with other common weeds which may be seen in most parts of India. These will all be new to a beginner but it is the true native flora of Delhi Ridge that has the greatest appeal to the author and the reviewer and most probably to the systematic botanist and conservator. This vegetation, although it contains no endemics and nothing that cannot be found in the bordering tracts of the Rajputana desert, the Punjab plains and the drier parts of Uttar Pradesh, is interesting never-the-less, and consists of tropical, thorny, xeromorphic shrubs and low trees, mingled with a characteristic ground flora of herbs and climbers, this herbaceous element varying in composition with the dry, wet, hot and cold seasons. Here we find thickets of *Prosopis spicigera*, *Anogeissus pendula* and various species of *Acacia* with *Balanites roxburghii*, *Butea monosperma*, *Capparis decidua*, *Grewia tenax*, *Salvadora oleoides* and *S. persica*. The author laments the loss of certain plants which used to grow on the Ridge in Royle's time and has made an appeal in the hope that the vegetation of the Ridge may be preserved. He states that out of 531 indigenous and naturalized species 478 have been dealt with; the rest have not been considered on account of their rarity, incomplete names and abnormal distribution. This remainder, 53 species, seems a rather high number, and its omission may arouse some curiosity. Perhaps some of the 53 are single individuals, mere adventive annuals that have arisen from a blown seed, unlikely to establish themselves and therefore not to be considered true members of the flora. Of these that have incomplete names surely the genus could have been mentioned.

Whatever the merits and usefulness of this book may be to the different classes of people who consult it, the most pleasing and satisfactory thing that the reviewer has noticed and for which he would award marks is the great attention that the author has paid to the rules of nomenclature. Although he may not have the correct botanical name and author's name in every case, his publication is more accurate in this respect than many that have come out of India in the past decade and the reviewer will certainly use his book as a guide when checking the validity of certain doubtful names and authors' names.

One may ask why there are no pictures in a publication of this kind. Perhaps it is intended that an illustrated volume should be prepared later if the need arises. It would have been helpful if some of the true native plants of the Ridge had been depicted but it is not necessary really to include the pantropical weeds as they are already illustrated to quite an extent in so many floras including some recent Indian ones. Unless the main outline drawings of species to be compared are accompanied by very careful enlarged insets of parts such as flowers and seeds, there is little point in adding any more rough sketches. Equipment and technique in India for processing such drawings must be in many instances defective while that for the reproduction of photographs, especially in government publications, is infinitely worse. Even original photographs of forest vegetation that are a credit to the author often look like scenes from the bottom of the sea by the time they have gone through the machinery of the press. For this reason probably some authors avoid submitting photographs altogether.

J. SINCLAIR.